

# AIR TRANSPORTATION AND FLIGHT ATTENDANT HEALTH

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**Background and Aims:** Few studies about the health consequences of flight attendant work exist, even though attending and safeguarding passengers is demanding work, usually involving circadian rhythm disruption and hazardous aircraft cabin exposures i.e. flame retardants, pesticides, jet fuel by-products, ozone, cosmic radiation, infectious diseases, and hypoxia. To understand the impact of these hazards, we conducted the largest survey of flight attendant general health to date. Importantly, flight attendant health provides a window into the healthiness of air travel for the flying public.

**Methods:** Flight attendants from two major US airlines were surveyed; by mail or in person (n=4011). We analyzed reported symptoms, health conditions, personal and job characteristics using Deletion/Substitution/Addition algorithm (DSA) in R statistical package.

**Results:** Respondents were 80% female with a mean age of 47; 87% were non-smokers; 41% had  $\geq 20$  years experience as a flight attendant. Health complaints reported as lasting  $>4$  of the past 7 days included sleep problems (35%), all types of musculoskeletal pain (between 23-28%), sinus congestion (28%), fatigue (26%), anxiety/stress (20%) and bloating (20%). The most common conditions associated with seeking medical care in the past year included respiratory (55%), fatigue (37%), diffuse joint pain (33%) and neurological (17-19%). The most prevalent diagnoses included low back pain (52.6%), allergies (39%) depression/anxiety (36%), and sleep disturbances (34%); approximately 1/5 of respondents who reported these conditions were receiving treatment for these problems. Regression analysis of prevalent conditions showed that fatigue, musculoskeletal problems, neurological and psychological problems are significantly associated with greater flight hours.

**Conclusions:** Several health problems affected a significant portion of the flight attendants. These conditions may affect the safe performance of the work, representing further risk to both crew and passengers. More research on the association between workplace exposures and crew health must be undertaken.